

Application No. 10/785,547
Amendment dated March 22, 2006
Reply to Final Office Action of December 22, 2005

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): An apparatus for cooling a patient to a temperature below normal body temperature, the apparatus comprising:

a framework of inflatable tubes;

a patient-enclosing air tent mounted on the framework of inflatable tubes, the inflatable tubes being operable, when inflated, to support the air tent above the patient, wherein the patient enclosing air tent is sized to enclose at least a portion of a single patient except a head portion of the patient; and

an air inlet connected to an air-cooling system for introducing cooled air into the patient enclosing air tent.

Claim 2 (original): The apparatus of claim 1 further comprising an outlet connected to the air-cooling system for re-circulating air from the air tent back to the air-cooling system to conserve energy.

Claim 3 (original): The apparatus of claim 2, further comprising a coaxial hose having an inner passage to send air into the air tent and an outer coaxial passage to carry air from the air tent.

Claim 4 (original): The apparatus of claim 1 further comprising a plurality of sets of interleaved air bags collectively forming a patient supporting surface, each set of interleaved air bags being independently inflatable; and a high air pressure source in fluid communication with the air bags;

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wherein the high air pressure source is operable to alternately inflate the sets of interleaved air bags to periodically relieve alternate regions of the patient's body from pressure.

Claim 5 (original): The apparatus of claim 4, further comprising a fluid connection between the air bags and the air cooling system, wherein the air bags are operable to be pressurized with either relatively high flow cold air which assists in cooling the patient but provides relatively little support or with relatively high pressure air which is sufficient to support the patient but which provides relatively less cooling effect.

Claim 6 (original): The apparatus of claim 1, further comprising:
a plurality of air bags collectively forming a patient supporting surface;
a high air pressure source in fluid communication with the air bags; and
a fluid connection between the air bags and the air cooling system, wherein the air bags can be pressurized with either relatively high flow cold air which assists in cooling the patient but provides relatively little support or with relatively high pressure air which is sufficient to support the patient but which provides relatively less cooling effect.

Claim 7 (original): The apparatus of claim 1, further comprising at least one aperture on the air tent for removable conduits, the aperture comprising a sleeve of flexible material operable to be tightened around a conduit by twisting the sleeve so that it collapses radially about the conduit.

Claim 8 (original): The apparatus of claim 7, wherein when no conduit is present, the sleeve is operable to be twisted tightly enough to close the aperture completely.

Claim 9 (original): The apparatus of claim 1, wherein the framework of inflatable tubes are operable to be moved between a closed position

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extending over the patient and an open position extending away from the patient, the framework including one or more inflatable connectors to releasably secure the framework in the closed position.

Claim 10 (original): The apparatus of claim 9, wherein the framework of inflatable tubes has a longitudinal dimension, wherein the framework of inflatable tubes is split along the longitudinal dimension between left and right halves, where each half can be moved from the closed position to the open position.

Claim 11 (original): The apparatus of claim 10, wherein at least one aperture is provided in the framework of inflatable tubes for receiving the inflatable connector.

Claim 12 (original): The apparatus of claim 11, wherein the inflatable connector comprises a stem and an inflatable protuberance having an outer dimension that, when the inflatable protuberance is inflated, exceeds the diameter of the aperture.

Claim 13 (original): The apparatus of claim 12, wherein the inflatable connector further comprises a tab attached to the protuberance to facilitate insertion of the protuberance through the aperture.

Claim 14 (currently amended): An apparatus for cooling a patient to a temperature below normal body temperature, the apparatus comprising:

- a pressurized air source;
- a framework of inflatable tubes in fluid connection with the pressurized air source;
- a patient-enclosing air tent mounted on the framework of inflatable tubes, the inflatable tubes being operable, when inflated, to support the air tent above the patient; and

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an air-cooling system to provide cold air to the interior of the patient-enclosing air tent, the cold air to affect a core temperature of the patient.

Claim 15 (original): The apparatus of claim 14, the patient-enclosing air tent having a plurality of transparent windows to enable visual contact between the patient and another person exterior of the patient-enclosing air tent.

Claim 16 (original): The apparatus of claim 14, the framework of inflatable tubes being split between left and right halves along a longitudinal dimension of the framework, each half further comprising an upper body section and a lower body section; each section of each half being independently operable to be moved between a closed position extending over the patient and an open position extending away from the patient.

Claim 17 (previously presented): The apparatus of claim 16, the framework including:

at least one inflatable connector to releasably secure the left and right halves of the upper body section together; and
at least one additional inflatable connector to releasably secure the left and right halves of the lower body section together.

Claim 18 (previously presented): The apparatus of claim 17, the framework further including:

at least one corresponding aperture in the upper body section of the framework for receiving the at least one inflatable connector; and

at least one additional corresponding aperture in the lower body section of the framework for receiving the at least one additional inflatable connector.

Claim 19 (previously presented): The apparatus of claim 18, wherein the inflatable connectors each comprise a stem and an inflatable protuberance

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having an outer dimension that, when the inflatable protuberance is inflated, exceeds the diameter of the corresponding aperture.

Claim 20 (previously presented): The apparatus of claim 19, wherein the inflatable connector further comprises a tab attached to the protuberance to facilitate insertion of the protuberance through the corresponding aperture.

Claim 21 (currently amended): An apparatus for cooling a patient to a temperature below normal body temperature, the apparatus comprising:

a plurality of air bags collectively forming a patient supporting surface;
a high-pressure air source in fluid connection with the air bags, the high-pressure air source operable to provide sufficient air pressure to support the patient;

a framework of inflatable tubes also in fluid connection with the high-pressure air source;

a patient-enclosing air tent mounted on the framework of inflatable tubes, the inflatable tubes being operable, when inflated, to support the air tent above the patient; and

an air-cooling system to provide cold air to the interior of the patient-enclosing air tent, the cold air to affect a core temperature of the patient.

Claim 22 (currently amended): An apparatus comprising:
a patient support;

a framework of inflatable tubes mounted on the patient support;
a patient-enclosing air tent mounted on the framework of inflatable tubes, the inflatable tubes being operable, when inflated, to support the air tent above the patient support; and

an air inlet connected to an air-cooling system for introducing cooled air into the patient enclosing air tent, the cold air to affect a core temperature of the patient.

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Claim 23 (previously presented): An apparatus comprising:

- a framework of inflatable tubes;**
- a patient-enclosing air tent mounted on the framework of inflatable tubes, the inflatable tubes being operable, when inflated, to support the air tent above the patient;**
- an air inlet connected to an air-cooling system for introducing cooled air into the patient enclosing air tent; and**
- a coaxial hose having an inner passage to send air into the air tent and an outer coaxial passage to carry air from the air tent.**